## **CLAIMS**

We claim:

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A method of testing digital graphics data, the method comprising the steps of:

providing digital graphics data of a predetermined type having an expected characteristic to a graphics output port of a graphics system;

receiving a representation of the digital graphics data from the

graphics output port; unit 100 receive straight is calculated characteristic based upon the representation of Column 1 the digital graphics data; and

providing the calculated characteristic to a serial interface of the graphics system.

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The method of claim 1, wherein the expected characteristic is a calculated value based upon the predetermined type of digital graphics data.

- 3. The method of claim 2, wherein the predetermined type of digital graphics data includes at least one of a red, green, and blue color component.
- 4. The method of claim 2, wherein the predetermined type of digital graphics data includes a horizontal synchronization component. C 4 1 68

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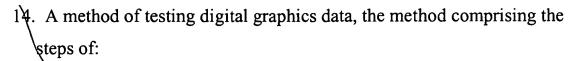
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- 5. The method of claim 4, wherein the predetermined type of digital graphics data includes at least one of a red, green, and blue color component.
- 6. The method of claim 2, wherein the predetermined type of digital graphics data includes a digital graphics vertical synchronization component.
  - 7. The method of claim 2, wherein the expected characteristic is a circular redundancy check (CRC) value.
  - 8. The method of claim 1, wherein the predetermined type of digital graphics data is selectable.
  - The method of claim 1, wherein
    the step of receiving includes receiving the representation of graphics
    data at a real-time graphics rate; and
    the steps of calculating and providing are performed in real time with
    respect to the step of receiving.
  - 10. The method of claim 1, wherein

the step of receiving includes receiving the representation of graphics data at a rate greater than 100 MHz; and

the steps of calculating and providing are performed in real time with respect to the step of receiving.

- 11. The method of claim 1, wherein the serial interface is an I2C-type serial interface.
  - 12. The method of claim 1, wherein the graphics output port includes an output port for a flat panel display.
  - 13. The method of claim 1, wherein the serial interface is associated with the graphics output port.



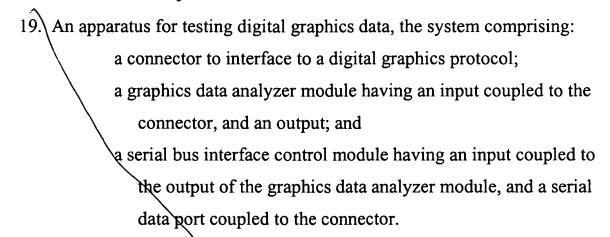
receiving digital graphics data at a graphics port;
determining a characteristic value upon the digital graphics data; and providing the characteristic value over a serial interface of the graphics port.

- 15. The method of claim 14, wherein the step of providing includes the graphics port being part of a digital graphics interconnect port.
- 16. The method of claim 15, wherein the digital graphics interconnect is based on a Digital Flat Panel interconnect standard interconnect.
- 17. The method of claim 14, wherein the steps of determining and providing occur in real-time with respect to the step of receiving.
  - 18. The method of claim 17, wherein the step of receiving includes receiving graphics data at a clock rate of at least 100 MHz.

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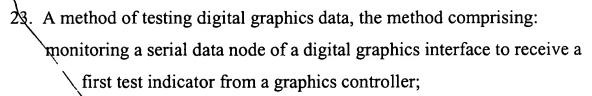
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- 20. The system of claim 19, wherein the serial data port is coupled to the connector to transmit serial data based upon the digital graphics protocol.
- 21. The system of claim 20, wherein the digital graphics protocol is a Digital Flat Panel standard.
- 22. The system of claim 19, further comprising a power supply terminal to receive power from a peripheral component interface (PCI) bus.

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- monitoring a graphics data node to receive a first graphics data from the graphics controller;
- determining a first test result based upon the first test indicator and the first graphics data in response to receiving a first test indicator and the first graphics data; and
- sending the first graphics data to the serial data node in response to determining the first test result.
- 24. The method of claim 23 further comprising the steps of::

  monitoring the serial data node of the digital graphics interface to

  receive a second test indicator from the graphics controller;

  monitoring the graphics data node to receive a second graphics data
  - monitoring the graphics data node to receive a second graphics data from the graphics controller;
  - determining a second test result based upon the second test indicator and the second graphics data in response to receiving a second test indicator and the second graphics data; and
- sending the second graphics data to the serial data node in response to determining the second test result.